UNDERGROUND
ENGINEERING &
ENVIRONMENTAL
SOLUTIONS

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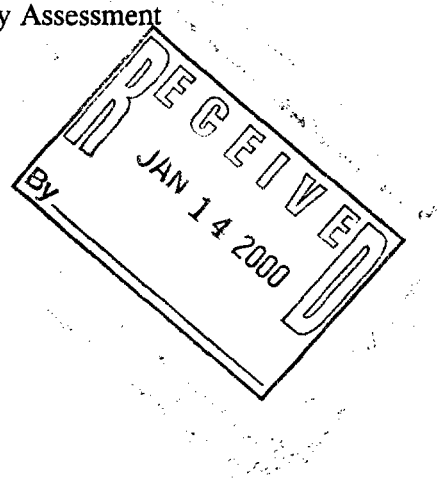
HALEY & ALDRICH

13 January 2000
File No. 75659-001

New Jersey Department of Environmental Protection
Bureau of Environmental Evaluation and Cleanup Responsibility Assessment
P.O. Box 432
401 East State Street
Trenton, NJ 08625



Attention: Joseph J. Nowak

Subject: Response to NJDEP 14 December 1999 Letter
Hexcel Corporation
Lodi Borough, Bergen County, New Jersey
ISRA Case No. 86009

Dear Mr. Nowak:

On behalf of Hexcel Corporation (Hexcel), this letter provides additional information requested in the New Jersey Department of Environmental Protection (NJDEP) 14 December 1999 letter and provides a revised schedule for remediation activities, including a schedule for submission of requested information not included with this letter. A Remedial Action Workplan Addendum (RAWA) was submitted to the NJDEP in November 1999. Some of the issues raised in the NJDEP's letter have been discussed in the RAWA and the NJDEP is referred to the RAWA for discussions relating to these issues. We request that the NJDEP review this letter as a supplement to the RAWA and reserve any further responses until after review of the RAWA as well. An item-by-item response to the NJDEP letter is provided below. A copy of the NJDEP 14 December 1999 letter is included as Appendix A.

I. SOIL COMMENTS

The NJDEP indicates that the November 1999 RAWA is currently under review. Please include this letter as part of the review process prior to providing a response to the RAWA.

II. GROUNDWATER COMMENTS

Water Elevation and LNAPL/DNAPL Monitoring and Recovery

1. No response needed.

2. No response needed.

3. The quarterly water elevation and product measurement table for data collected in February 1999 is attached as Table I.

Ground Water Sampling

4. NJDEP has requested isoconcentration maps for shallow and deep wells for total targeted VOCs, individual VOC compounds, and PCBs. We are preparing these maps and will submit these to the NJDEP by 29 February 2000.

5. The field sampling logs for groundwater sampling conducted in 1998 were included with the laboratory QA/QC packages submitted with the October 1998 progress report. For your convenience, we have included an additional copy of the field sampling report as Appendix B.

6. As requested by the NJDEP, Appendix C provides a copy of Haley & Aldrich letter dated 21 July 1998 requesting access to two of Hexcel's wells on the Napp property (MW-25 and MW-31) and one Napp well (MW-E8) for the groundwater sampling event in 1998. The request letter was followed by a number of phone calls to Napp's attorney in an effort to obtain approval for access. Napp's attorney, Norman Spindel, denied access to the Napp property over a telephone call on 30 July 1998 (the day the sampling was scheduled). Napp's denial to access was referred to in Haley & Aldrich's letter to Napp dated 11 August 1998 (also included in Appendix C).

7. No response needed.

8. The VOC concentrations in MW-3 will be monitored within the groundwater monitoring program for the site.

9. Hexcel proposed to sample selected wells for Base/Neutral (BNAs) exceedances based on the historical testing results available for the wells as well as to evaluate the need to perform surface water sampling for BNA. In addition to the wells along the Saddle River, well CW-3 was also proposed to be sampled for BNAs since this was the only well with significant concentrations of BNAs during its previous testing round. The need for post-remedial groundwater sampling for BNAs will be evaluated based on the results of the pre-remediation BNA testing results for wells MW-8, 10, 14, 28, CW-3, 11, and 12.

10. No response needed.

11. Based on our experience with numerous other cases over the last two years, NJDEP has routinely approved and even recommended that low-flow sampling procedures be employed for metals sampling without requiring a case-by-case review. As requested by NJDEP, the information requested for approval of low-flow purging and sampling for metals is provided as Appendix D. NJDEP has referred to the *EPA Ground Water Issue: Low-Flow (Minimal Drawdown) Ground Water Sampling Procedures, EPA/540/S-95/504, April 1996* for information on low-flow sampling. Please be advised that the final version

of this document is dated *16 March 1998* and is referred to as *Final GW Sampling Standard Operating Procedure, Ground Water Sampling Procedure, Low Stress (Low Flow) Purging and Sampling*. The low-flow purging and sampling procedures at Hexcel will be conducted in accordance with the EPA March 1998 Final Ground Water SOP for low-flow purging. A copy of this document is also provided in Appendix D.

12. NJDEP's use of unfiltered samples is acknowledged. We will be presenting filtered results as well to evaluate whether turbidity is affecting the testing results as even the low-flow samples are not expected to be completely free of particulates.

13. Based on the available information, there are no known sources of metals contamination at the site.

Horizontal delineation Across Molnar Road

14. No response needed.

Vertical Delineation in the area of MW-26

15. NJDEP requires additional borings in Building 2 to investigate the topography of the silt layer under the building. Hexcel is evaluating the potential for utilizing non-intrusive techniques (geophysical survey, sonic techniques) for this purpose to allow locating the boring/monitor well appropriately. The cost of performing a non-intrusive mapping will be weighed against the cost of completing multiple borings in making a decision. We will provide NJDEP with an investigation plan for Building 2 by 29 February 2000.

16. See above. The investigation plan proposed to be submitted to the NJDEP will include a revised boring location plan and proposal for well completion.

Vertical Delineation near MW-1

17. The November 1999 RAWA submitted to the NJDEP provides the remedial strategy for shallow soil and groundwater remediation with the area in the vicinity of MW-1 targeted for the first application of the 2-Phase Extraction technology. A bedrock well will be installed in this area following the achievement of the remediation objectives, as outlined in the RAWA. A schedule for implementation of remediation was provided in the RAWA. An updated schedule which includes the time frame for the bedrock investigation is provided as Table II with this letter.

Migration of DNAPL under Saddle River

18. As requested by the NJDEP, the soil boring logs for the stream bed investigation are included as Appendix E.

Surface Water Sampling

19. Based on the 20 May 1999 meeting with the NJDEP, a revised surface water sampling plan in accordance with the NJDEP 3 February 1999 letter, was included in the RAWA. The plan proposes collection of surface water samples at 7 locations, as originally required by the NJDEP.

20. No response needed.

Basement Seepage and Groundwater Treatment System

21. The seepage historically recovered from the basement of Building 1 was collected on the floor of the basement and not from within a pit set into the floor of the basement.

III. GENERAL REQUIREMENTS

1. No response needed.

2. A revised Estimated Schedule of Remedial Activities, which superceded the schedule estimated with the RAWA, is included as Table II.

3. No response needed.

4. No response needed.

5. In anticipation of the approval of the remediation strategy for the site from the NJDEP, Hexcel has initiated the process for obtaining permits to allow for the discharge of treated groundwater and air. Additionally, Hexcel is evaluating the need for an extended 2-Phase Extraction pilot test to collect additional site-specific data in each of the areas of concern for preparation of final system design. The results of a short (< 8 hour) pilot test were provided to the NJDEP within the RAWA.

6. No response needed.

7. A revised cost estimate for remediation was provided to the NJDEP in the November 1999 RAWA.

Please call us if you have any questions regarding the above.

Sincerely yours,
HALEY & ALDRICH, INC.

Sunila Gupta
Project Engineer

Joseph G. Savarese
Project Manager

Enclosures
cc: A. William Nosil
Edward Hogan, Esq.

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Tables

TABLE I

QUARTERLY WATER LEVEL/PRODUCT THICKNESS MEASUREMENTS (2/17/99)
HEXCEL FACILITY
LODI, NEW JERSEY

-All measurements in feet -
-All elevations in feet (NGVD)-

Well ID	Type	Depth to Water (2/17/99)	Depth to Product		Product Thickness		Depth to Bottom (2/17/99)	Elevation Top of Casing	Water Elevation (2/17/99)	Well Construction		Comments
			DNAPL	LNAPL	DNAPL	LNAPL				Type	Casing	
RW Series:												
RW1-1	shallow	NA	--	--	--	--	NA	28.24	NA	flush	s.steel	Absorbent pad inadvertently dropped in the well.
RW6-1	shallow	2.98	--	--	--	--	13.55	28.84	25.86	flush	s.steel	Product on probe (DNAPL)**.
RW6-2	shallow	NA	--	--	--	--	NA	29.34	NA	flush	s.steel	Not measured; well casing elevation has changed.
RW6-3	shallow	3.99	--	--	--	--	5.45	28.72	24.73	flush	s.steel	
RW7-1	shallow	5.80	--	--	--	--	16.64	26.25	20.45	flush	s.steel	
RW7-2	shallow	6.28	--	--	--	--	16.92	26.48	20.20	flush	s.steel	
RW7-3	shallow	6.55	--	--	--	--	17.25	26.78	20.23	flush	s.steel	
RW7-4	shallow	6.94	--	--	--	--	19.10	27.11	20.17	flush	s.steel	Product on probe (DNAPL)**.
RW7-5	shallow	7.57	--	--	--	--	19.28	27.57	20.00	flush	s.steel	Product on probe (DNAPL)**.
RW7-6	shallow	6.97	--	--	--	--	15.07	26.48	19.51	flush	s.steel	
RW7-7	shallow	7.02	--	--	--	--	14.90	26.89	19.87	flush	s.steel	
RW7-8	shallow	5.44	--	--	--	--	15.04	25.90	20.46	flush	s.steel	
RW7-9	shallow	7.05	--	--	--	--	16.25	26.87	19.82	flush	s.steel	Sediment on probe.
RW7-10	shallow	7.14	--	--	--	--	14.20	26.10	18.96	flush	s.steel	
RW15-1	shallow	6.89	--	--	--	--	14.98	29.95	23.06	flush	s.steel	
RW15-2	shallow							30.15		flush	s.steel	Well not included in quarterly monitoring plan.

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LODI, NEW JERSEY

-All measurements in feet -

-All elevations in feet (NGVD)-

Well ID	Type	Depth to Water (2/17/99)	Depth to Product		Product Thickness		Depth to Bottom (2/17/99)	Elevation Top of Casing	Water Elevation (2/17/99)	Well Construction		Comments
			DNAPL	LNAPL	DNAPL	LNAPL				Type	Casing	
P Series:												
P-1	shallow	6.44	--	--	--	--	9.32	30.09	23.65	flush	1.5" pvc	
P-2	shallow	WA					WA	30.19	WA	flush	1.5" pvc	Well was sealed on March 29, 1996.
PI Series:												
PI-1	deep							26.90		flush	8" s.steel	Well not included in quarterly monitoring plan.
CW Series:												
CW-1	shallow	7.07	--	--	--	--	11.51	29.77	22.70	flush	s.steel	
CW-2	shallow							29.51		flush	s.steel	Well not included in quarterly monitoring plan.
CW-3	shallow							29.72		flush	s.steel	Recovery well; not included in monitoring plan.
CW-4	shallow	6.03	--	--	--	--	11.02	28.83	22.80	flush	s.steel	
CW-5	shallow							28.67		flush	s.steel	Recovery well; not included in monitoring plan.
CW-6	shallow							28.93		flush	s.steel	Well not included in quarterly monitoring plan.
CW-7	shallow	7.45	--	--	--	--	14.05	26.13	18.68	flush	s.steel	
CW-8	shallow	8.36	--	--	--	--	13.98	26.77	18.41	flush	s.steel	
CW-9	shallow							26.37		flush	s.steel	Recovery well; not included in monitoring plan.
CW-10	shallow	7.36	--	--	--	--	10.28	25.91	18.55	flush	s.steel	

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Well ID	Type	Depth to Water (2/17/99)	Depth to Product		Product Thickness		Depth to Bottom (2/17/99)	Elevation Top of Casing	Water Elevation (2/17/99)	Well Construction		Comments
			DNAPL	LNAPL	DNAPL	LNAPL				Type	Casing	
CW Series (continued):												
CW-11	shallow							25.74		vaultbox	s.steel	Recovery well; not included in monitoring plan.
CW-12	shallow	7.26	--	--	--	--	14.03	25.71	18.45	flush	s.steel	Product on probe (DNAPL)**.
CW-13	shallow							26.05		flush	s.steel	Well not included in quarterly monitoring plan.
CW-14	shallow	7.81	--	--	--	--	13.94	26.37	18.56	flush	s.steel	
CW-15	shallow							26.31		flush	s.steel	Recovery well; not included in monitoring plan.
CW-16	shallow	7.57	--	--	--	--	13.93	26.45	18.88	flush	s.steel	Product on probe (DNAPL)**.
CW-17	shallow	6.98	--	--	--	--	14.05	26.25	19.27	flush	s.steel	
CW-18	shallow							26.61		flush	s.steel	Recovery well; not included in monitoring plan.
CW-19	shallow							26.50		flush	s.steel	Well not included in quarterly monitoring plan.
CW-20	shallow							26.74		flush	s.steel	Well not included in quarterly monitoring plan.
CW-21	shallow							26.77		flush	s.steel	Recovery well; not included in monitoring plan.
CW-22	shallow							26.35		flush	s.steel	Well not included in quarterly monitoring plan.
MW Series:												
MW-1	deep	10.06	--	--	--	--	23.61	32.42	22.36	stickup	pvc	
MW-2	shallow	7.90	--	--	--	--	10.30	31.00	23.10	stickup	pvc	
MW-3	deep	10.48	--	--	--	--	30.89	31.13	20.65	stickup	pvc	
MW-4	shallow	8.02	--	--	--	--	9.92	32.33	24.31	stickup	pvc	
MW-5	deep	11.35	--	--	--	--	28.47	32.54	21.19	stickup	pvc	

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Well ID	Type	Depth to Water (2/17/99)	Depth to Product		Product Thickness		Depth to Bottom (2/17/99)	Elevation Top of Casing	Water Elevation (2/17/99)	Well Construction		Comments
			DNAPL	LNAPL	DNAPL	LNAPL				Type	Casing	
MW Series (continued):												
MW-6	shallow	10.52	17.97	--	0.43	--	18.40	30.74	20.22	stickup	pvc	Product on probe (DNAPL)**.
MW-7	deep	9.81	--	--	--	--	32.97	30.68	20.87	stickup	pvc	
MW-8	shallow	11.84	--	--	--	--	17.30	30.26	18.42	stickup	pvc	
MW-9	deep	8.99	--	--	--	--	29.66	29.83	20.84	stickup	pvc	
MW-10	shallow	12.54	--	--	--	--	16.82	30.83	18.29	stickup	pvc	
MW-11	deep	10.22	--	--	--	--	33.60	30.78	20.56	stickup	pvc	
MW-12	shallow	10.51	--	--	--	--	17.25	31.01	20.50	stickup	pvc	
MW-13	deep	9.86	--	--	--	--	33.24	31.16	21.30	stickup	pvc	
MW-14	shallow	11.51	--	--	--	--	15.65	30.70	19.19	stickup	pvc	
MW-15	deep	9.03	--	--	--	--	25.70	30.77	21.74	stickup	pvc	
MW-16	shallow	6.96	--	--	--	--	12.62	29.69	22.73	stickup	pvc	
MW-17	shallow	10.26	--	10.26	--	0.02	14.15	31.44	21.18	stickup	pvc	Measured depth to water was 10.28'; product on probe (LNAPL)
MW-18	shallow	8.98	--	--	--	--	11.34	32.23	23.25	stickup	pvc	
MW-19	deep	7.27	--	--	--	--	26.70	29.08	21.81	stickup	pvc	
MW-20	shallow	5.40	--	--	--	--	20.15	27.95	22.55	flush	pvc	
MW-21	shallow	8.63	--	--	--	--	15.19	30.67	22.04	stickup	pvc	
MW-22	shallow	5.67	--	--	--	--	8.26	28.45	22.78	flush	pvc	
MW-23	shallow	4.42	--	--	--	--	9.64	27.51	23.09	flush	pvc	
MW-24	shallow	3.68	--	--	--	--	9.47	26.51	22.83	flush	pvc	
MW-25	shallow	NA					NA	26.03	NA	flush	pvc	Well on Napp property; access denied.

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LODI, NEW JERSEY

-All measurements in feet -
-All elevations in feet (NGVD)-

Well ID	Type	Depth to Water (2/17/99)	Depth to Product		Product Thickness		Depth to Bottom (2/17/99)	Elevation Top of Casing	Water Elevation (2/17/99)	Well Construction		Comments
			DNAPL	LNAPL	DNAPL	LNAPL				Type	Casing	
MW Series (continued):												
MW-26	(a)	7.26	17.62	--	0.37	--	17.99	28.85	21.59	flush	2" pvc	Product on probe (DNAPL).
MW-27	shallow	7.43	--	--	--	--	11.95	31.43	24.00	stickup	pvc	
MW-28	shallow	10.50	--	--	--	--	14.70	29.68	19.18	stickup	pvc	
MW-29	shallow	4.16	--	--	--	--	9.38	27.32	23.16	flush	pvc	
MW-30	shallow	4.71	--	--	--	--	10.50	28.08	23.37	flush	pvc	
MW-31	shallow	NA	--	--	--	--	NA	27.95	NA	flush	pvc	Well on Napp property; access denied.
MW-32B	shallow	8.25	--	--	--	--	11.05	31.23	22.98	flush	pvc	
MW-33	shallow	9.85	--	--	--	--	17.03	31.72	21.87	stickup	pvc	
PB Series:												
PB-1	shallow	NA					NA	21.78	NA	stickup	2" g.steel	The Building I pit has been rendered inaccessible for
PB-2	shallow	NA					NA	21.25	NA	stickup	2" g.steel	monitoring. Prior to demolition, the pit was covered
PB-4	shallow	NA					NA	21.52	NA	stickup	2" g.steel	with steel plates to avoid debris falling into the pit.

NOTES: All measurements of depths are from the top of casing unless otherwise noted. All wells are 4" diameter unless otherwise noted.

--: Not detected by product interface meter.

NA Measurements not available.

(a): Ground water elevation data from MW-26 have been excluded from both shallow and deep aquifer contours; refer to Section 1a of the April 1996 Report for details.

*: In wells with LNAPL, water levels are corrected using the equation: DTW (corrected) = DTW (measured) - (Product thickness * specific gravity). Specific gravity of 0.88 used for water level correction (petroleum lubricating oil).

**: Though the product interface meter did not register presence of product in the well, product was observed on the probe.

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Table II: Estimated Schedule for Remediation

Activity/Application	Estimated Schedule
Submission of RAWA	November 1999
NJDEP letter with comments on proposals submitted prior to the RAWA submission	14 December 1999
Response to NJDEP 14 December 1999 letter	Letter to NJDEP on 14 January 2000 providing most of the requested information.
Submission of VOC Contour Maps and revised Building 2 Investigation Plan in response to NJDEP 12/14/99 letter	29 February 2000
NJDEP's Approval of the RAWA and 14 January and 29 February 2000 supplements to the RAWA	March 2000
Pre-Construction Tasks; Extended Pilot Test and temporary discharge permits, if appropriate; System Design; Obtain Air and Groundwater Discharge Permits; Prepare Bid Specifications; Review Proposals from Contractors; Procure Equipment Additional Investigation Activities proposed in the RAWA including groundwater sampling, surface water sampling, and ecological assessment Excavation of Surface PCBs and Post-Excavation Sampling	March 2000 through December 2000
Commence 2-Phase in AOC-1A	January 2001
Anticipated completion of 2-phase in AOC-1A; bedrock investigation in the vicinity of MW-1	Fall 2001
Implement and Continue 2-Phase in additional source areas	3 Years (Till December 2003)
Apply HRC, if appropriate Remove PCBs, if necessary	2004
Apply Engineering and Institutional Controls including a Classification Exception Area (CEA) and Deed Notice, if required	2004-2005
Continued groundwater monitoring as part of the CEA	Until site-specific cleanup objectives (Section 12) are met